

Remarks/Arguments:

Claims 1-25 are pending in the application. Claims 19-22 have been withdrawn from consideration. Claim 1 has been amended to more clearly point out that the gas supply system of Applicant's claimed apparatus consists of two separate portions, one for supplying the primary fluidizing gas – as would be found in a typical fluidized bed – and a second for supplying a controlled pulsating portion of gas that is in excess of that required for typical fluidization of the powder above the plenum.

Summary of Applicant's Invention

Applicant's invention solves certain problems created by the typical fluidized bed coater, namely that the fact that the fluidized powder is relatively static results in mixing problems and temperature gradients and thus uneven coating. In addition to the primary fluidizing portion of gas to the plenum to suspend a powdered material in the coating chamber in a fluidized volume, Applicant's invention adds a second gas portion that is a controllable pulsating portion for delivery of a controllable supply of gas to the plenum which causes a variation in the fluidized powder and homogenization of the fluidized powder.

Response to the Examiner's Arguments in Final Rejection

The Examiner contends that the devices of the cited art are capable of producing a pulsating action, and therefore they meet Applicant's claim limitations. Applicant respectfully disagrees.

Gillette - 35 U.S.C. §102

The apparatus of the Gillette (US 5,242,718) reference has two gas sources. One (146 into 148) is for the typical fluidizing portion in the plenum. The second air supply (120) goes, not into the plenum, but rather into the powder hopper (72). The purpose of this second air supply is to agitate the powder in the hopper and prevent it from packing together and not entering the funnel section of the hopper. Any built-up gas pressure in the hopper is allowed to escape into the atmosphere (not into the plenum) through a filtered opening (86). (Col 6, lines 28-36). Thus the Gillette reference fails to teach or suggest a second gas portion that goes into the plenum, as claimed by Applicant. As described in the Gillette patent, the second gas source is not capable of entering the plenum, and thus is not capable of performing the function provided by Applicant's second gas supply. Accordingly, Gillette does not teach all of the claim limitations, and the rejection should be withdrawn.

Luy - 35 U.S.C. §102

The Luy (US 5,766,557) apparatus contains multiple gas sources to control valves and seals, but only a single gas source (29) for supplying process gas. When pressure is released from the seals, it is released into the atmosphere – not into the plenum. Thus the Luy reference fails to teach or suggest a second gas portion that goes into the plenum, as claimed by Applicant. As described in the Luy patent, the multiple gas sources for controlling valves are not capable of entering the plenum, thus not capable of performing the function provided by Applicant's second gas supply. Accordingly, Luy does not teach all of the claim limitations, and the rejection should be withdrawn.

Blakeslee, Ganiaris, Gimben - 35 U.S.C. §103

Claims 2 -18 and 23-25 are rejected over Gillette in view of Blakeslee (3,918,401), Ganiaris (US 3,888,423) and/or Gimben (5,454,256). Blakeslee, Ganiaris and Gimben are all secondary references used to establish that the air can be compressed, the air supply can be divided into two streams – with one stream pulsed, and that a blower can be used. However, the Gillette reference – as described above - fails to teach or suggest multiple gas supplies to a plenum for a fluidized bed operation, and none of the secondary references, either alone or together, heals this defect in the Gillette reference with respect to Applicant's claimed apparatus.

The Ganiaris reference has a single gas flow to the plenum, and thus does not provide the missing claim feature.

The Blakeslee reference describes an apparatus to spray coat an article, in which a gas supply is split – one portion used to fluidize a powder feed, and a second (pulsating) portion to shoot the fluidized powder onto an article. Blakeslee describes a spray operation, not a fluidized bed. There is no plenum into which the fluidized powder is introduced, but rather a spray chamber. Articles are not immersed into a fluidized powder, but rather a fluidized powder is sprayed onto an article. Thus the pulsating gas portion is not capable of homogenizing a bed of fluidized powder, but is configured to merely transport the fluidized powder in a stream from the powder chamber to the article. The Blakeslee apparatus (as a spray coater) would render the Gillette (or Applicant's) fluidized bed coater unsatisfactory for its intended use (MPEP 2143.01).

The Gimben reference is also directed to a spray gun apparatus that has no plenum and no immersion, and thus no multiple gas supply to a plenum that could heal the defects of the Gillette reference.

In addition to failing to provide all of the features of the present claims, there is no motivation in any of the cited references, alone or in combination, to practice all of the elements and limitations of Applicant's claims. In view of the above, Applicant believes that the reasons for rejection have been overcome, and the claims, as amended herein, should be allowable to the Applicant. Accordingly, reconsideration and allowance are requested.

Appln. No.: 10/652,844
Amendment Dated November 7, 2006
Reply to Office Action of September 7, 2006

IR-3710 (EAN-118US)

Applicant invites the Examiner to contact his undersigned representative, Frank Tise, if it appears that such contact may expedite examination of this application.

Respectfully submitted,



Paul F. Prestia, Reg. No. 23,031
Frank P. Tise, Reg. No. 50,379
Attorney and Agent for Applicant

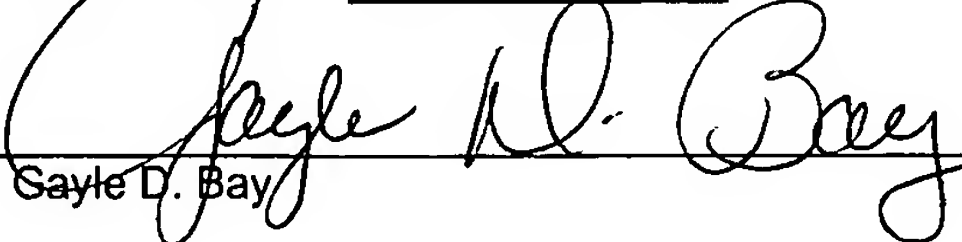
PFP/FPT/gdb

Dated: November 7, 2006

P.O. Box 1596
Wilmington, DE 19899
(302) 778-2500

The Director is hereby authorized to charge or credit Deposit Account No. **18-0350** for any additional fees, or any underpayment or credit for overpayment in connection herewith.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to:
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on: **November 7, 2006**


Gayle D. Bay